



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/530,642	12/05/2005	David B Harder	758.1416USWO	7536
23552	7590	12/26/2007		
MERCHANT & GOULD PC P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903			EXAMINER GONZALEZ, MADELINE	
			ART UNIT 1797	PAPER NUMBER
			MAIL DATE 12/26/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/530,642	Applicant(s) HARDER ET AL.	
	Examiner Madeline Gonzalez	Art Unit 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>04/06/05</u> . | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
5) <input type="checkbox"/> Notice of Informal Patent Application
6) <input type="checkbox"/> Other: _____. |
|--|---|

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 19, 20, 22, 24, 25 and 27-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Covington (U.S. 5,833,843).

With respect to **claim 19**, Covington discloses a filter 10, as shown in Fig. 1, having:

- a housing 14 having a wall defining a closed end, an open end, an interior volume, and an inwardly extending ledge 29;
- the housing 14 including a threaded region 32 adjacent to the open end;
- the inwardly extending ledge 29 being circumferential and extending completely along an internal surface of the housing wall, as shown on Fig. 8;
- the inwardly extending ledge 29 being located between the closed end and the threaded region, as shown in Fig. 8;
- a filter cartridge 12 oriented within said interior volume of said housing 14;
- said filter cartridge 12 including a tubular construction of filter media defining an open filter interior, as shown in Fig. 1;

- said tubular construction of filter media having a first end;
- said filter cartridge 12 includes an end cap 23 secured to said first end of said tubular construction of filter media; said end cap 23 defining an aperture in fluid communication with said open filter interior, as shown in Fig. 1;
- a projection arrangement 60 constructed and arranged to space said filter cartridge 12 from said housing wall to define a fluid flowpath between said filter cartridge 12 and said housing wall, as shown in Fig. 1;
- the projection arrangement 60 includes a base 62 and a sidewall 64, as shown in Fig. 6;
- said projection arrangement 60 having at least one projection 74 in extension from at least one of said base 62 and said sidewall 74, as shown in Fig. 6;
- the projection arrangement 60 engaging the inwardly extending ledge 29 to space said filter cartridge 12 from said housing wall to define a fluid flowpath between said filter cartridge 12 and said housing wall, as shown in Fig. 1.

With respect to **claim 20**, Covington discloses wherein said projection arrangement 60 includes a plurality of projections 74, as shown in Fig. 7.

With respect to **claim 22**, Covington discloses wherein said base 62 and said sidewall 64 are part of a plate that is a separate piece from said end cap 23 as shown in Fig. 8.

With respect to **claim 24**, Covington discloses wherein each of said projections 74 extends axially from said sidewall 64 of said projection arrangement 60, as shown in Fig. 6. The limitation "from said sidewall of said end cap" lacks antecedent basis since claim 19 states that the projection arrangement has a sidewall and not the end cap. For examination purposes the Examiner assumes that the projection arrangement has a sidewall, as stated in claim 19.

With respect to **claim 25**, Covington discloses wherein said sidewall 64 includes a media-containing portion that forms a continuous wall around said filter media; said media-containing portion extending from said base 62 and having an end 68; each of said projections 74 being in extension from said end of said media-containing portion, as shown in Fig. 6.

With respect to **claim 27**, Covington discloses wherein each of said projections 134 extends radially to engage the inwardly extending ledge 29, as shown in Fig. 10.

With respect to **claim 28**, Covington discloses wherein each of said projections 134 extends radially from said base 120 of said projection arrangement 110, as shown in Fig. 13. The limitation "from said base of said end cap" lacks antecedent basis since claim 19 states that the projection arrangement has a base and not the end cap. For examination purposes the Examiner assumes that the projection arrangement has a base, as stated in claim 19.

With respect to **claim 29**, Covington discloses wherein said sidewall 122 includes a media-containing portion 150 that forms a continuous wall around said filter media; said media-containing portion extending from said base 120; and said projections 134 being generally orthogonal relative to said media-containing portion, as shown in Fig. 10.

With respect to **claim 30**, Covington discloses wherein a portion of the housing wall adjacent to the filter media, said portion being the area between end cap 20 and the housing wall) defines an internal diameter about equal to an internal diameter of the housing wall between the threaded section 32 and the internally extending ledge 29, as shown in Fig. 1; between the internally extending ledge 29 and the portion is a region of the housing wall having an internal diameter greater than the internal diameter of the portion to form a relief; the relief allowing the projection arrangement to spring back to a normal position, as shown in Fig. 1.

Claims 19-21, 23, 26 and 31-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Oelschlaegel (U.S. 6,146,527).

With respect to **claim 19**, Oelschlaegel discloses a filter cartridge 10, as shown in Fig. 1, having:

- a housing 12 having a wall defining a closed end 35, an open end, an interior volume, and an inwardly extending ledge 102;

- the housing 12 including a threaded region 126, as shown in Fig. 2, adjacent to the open end;
- the inwardly extending ledge 102 being circumferential and extending completely along an internal surface of the housing wall, as shown on Fig. 1;
- the inwardly extending ledge 102 being located between the closed end and the threaded region, as shown in Fig. 2;
- a filter cartridge 14 oriented within said interior volume of said housing 12;
- said filter cartridge 14 including a tubular construction of filter media 60 defining an open filter interior, as shown in Fig. 2;
- said tubular construction of filter media 60 having a first end;
- said filter cartridge 14 includes an end cap 66 secured to said first end of said tubular construction of filter media 60; said end cap 66 defining an aperture in fluid communication with said open filter interior, as shown in Fig. 1;
- a projection arrangement constructed and arranged to space said filter cartridge 14 from said housing wall to define a fluid flowpath between said filter cartridge 14 and said housing wall, as shown in Fig. 2;
- the projection arrangement includes a base 78 and a sidewall 80, as shown in Fig. 1;
- said projection arrangement having at least one projection 94 in extension from at least one of said base 78 and said sidewall 80, as shown in Fig. 1;

- the projection arrangement engaging the inwardly extending ledge 102 to space said filter cartridge 14 from said housing wall to define a fluid flowpath between said filter cartridge 14 and said housing wall, as shown in Fig. 2.

With respect to **claim 20**, Oelschlaegel discloses wherein said projection arrangement includes a plurality of projections 94, as shown in Fig. 1.

With respect to **claim 21**, Oelschlaegel discloses wherein each of said projections 94 extends axially to engage said housing 12, as shown in Fig. 2.

With respect to **claim 23**, Oelschlaegel discloses wherein said base 78 and said sidewall 80 are part of said end cap 66, as shown in Fig. 1.

With respect to **claim 26**, Oelschlaegel discloses wherein each of said projections 94 includes a free end; each free end of said projections 94 engaging the inwardly extending ledge 102, as shown in Fig. 1.

With respect to **claim 31**, Oelschlaegel discloses wherein said filter media 60 includes pleated media (see col. 4, lines 55-64) and a second end opposite of said first end; said end cap 66 is a first end cap; and said filter cartridge 14 further includes: a second end cap 68 secured to said second end of said filter media 60; said second end cap 68 being closed, as shown in Fig. 2; and an inner tubular liner 90 circumscribed by

said pleated media 60; said inner tubular liner 90 extending between said first end cap 66 and said second end cap 68, as shown in Fig. 2.

With respect to **claim 32**, Oelschlaegel discloses a filter head 16 having a fluid flow inlet port 20 and a fluid flow outlet port 26, and a filter arrangement being releasably secured to said filter head 16, as shown in Fig. 2. The rest of the limitations of claim 32 are met by Oelschlaegel as already discussed above with respect to claim 19.

With respect to **claim 33**, Oelschlaegel discloses the method steps of:

- inserting a filter cartridge 14 and a projection arrangement into an open end of a housing 12; and
- engaging projections 94 on the projection arrangement against a portion of the housing 12 to secure the filter cartridge 14 in the housing 12;
- the portion of the housing 12 including an inwardly extending circumferential ledge 102 extending completely along an internal surface of the housing 12; and
- the engagement of the projection arrangement is against a side of the ledge 102 directed to a closed end of the housing 12, as shown in Fig. 2.

With respect to **claim 34**, Oelschlaegel discloses wherein the filter cartridge 14 includes an end cap 66 having the projections 94 extending therefrom; and said step of

engaging includes engaging the projections 94 from the end cap 66 against the inwardly extending ledge 102 of the housing 12, as shown in Fig. 1.

With respect to **claim 35**, Oelschlaegel discloses wherein said step of inserting includes inserting a filter cartridge 17 and then inserting a separate plate 102 into the open end of the housing 12; the separate plate 102 including the projecting arrangement, as shown in Fig. 1.

With respect to **claim 36**, Oelschlaegel discloses wherein said step of inserting includes snapping the projections over a radial protrusion 106 in the housing 12; and said step of engaging includes engaging the projections 94 against the radial protrusion 106, as shown in Fig. 1.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Madeline Gonzalez whose telephone number is 571-272-5502. The examiner can normally be reached on M-F 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R. Sample can be reached on 571-272-1376. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number:
10/530,642
Art Unit: 1797

Page 10

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Madeline Gonzalez
Patent Examiner
December 19, 2007

A handwritten signature in black ink, appearing to read 'K Menon', with a stylized, cursive script.

KRISHNAN MENON
PRIMARY EXAMINER